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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,878	10/28/2003	Naohiro Isshiki	03500.017691	4090
5514	7590	10/08/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			HAMDAN, WASSEEM H	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	

2854

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/693,878	ISSHIKI, NAOHIRO	
	Examiner	Art Unit	
	Wasseem H Hamdan	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/10/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - a. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: REDUCING A DIFFERENCE OF PICTURE QUALITY BETWEEN A DETERIORATED AND A NON-DETERIOTED IMAGES USING A PRINTING APPARATUS.

Appropriate correction is required. Please see below the description on the Title.

Content of Specification

Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.

- b. The "field of the Invention" is not descriptive and does not represent the invention.

Appropriate correction is required. Please see below the description on the Field of the Invention.

Content of Specification

Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

- c. Specification, page 11, line 14, "JPEG" should be spelled out such as "Joint Photographic Experts Group (JPEG)".

Drawings

a. Figure 9 (per the specification page 6, lines 5-7) should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- b. The drawings are objected to because :
 - i. Box 1001 requires descriptive legend such as " Printer Control Unit";
 - ii. Box 1000 requires descriptive legend such as " Laser Beam Printer (LBP)"; and
 - iii. Box 5 requires descriptive legend such as " system bus".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should

Art Unit: 2854

not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, is considered as being indefinite because it recites in line 1 “A program product”, is the claim about a program instructions (or “a program routines or sub-routines”) or it is about a product? The examiner believes that the applicant meant to recite instead “A program instructions” or “A program routines or sub-routines” and the claims were examined accordingly.

Art Unit: 2854

Also claim 11, is considered as being indefinite because it recites in lines 2, 6 and 9 recites “step”, if the applicant meant that the claim is about program instructions or a program routines or sub-routines, the “step” should be change to instruction (or routines or sub-routines).

Regarding claim 13, is considered as being indefinite because it recites in lines 2 and 4 “step”, if the applicant meant that the claim is about program instructions or a program routines or sub-routines, the “step” should be change to instruction (or routines or sub-routines).

Regarding claim 14, is considered as being indefinite because it recites in lines 3 and 5 recites “step”, if the applicant meant that the claim is about program instructions or a program routines or sub-routines, the “step” should be change to instruction (or routines or sub-routines).

Regarding claim 15, is considered as being indefinite because it recites in lines 3 and 5 recites “step”, if the applicant meant that the claim is about program instructions or a program routines or sub-routines, the “step” should be change to instruction (or routines or sub-routines).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2854

5. Claims 1-7, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Oki et al. (US Patent 5,835,122).

Regarding claims 1, 6 and 11, Oki et al. discloses a printing apparatus (printing method, the steps; and a program “instructions or routines or sub-routines”) [FIG. 1; column 2, lines 48-49] comprising:

a discriminating unit [203; column 9, lines 21-22] for discriminating whether an image is an image including a deteriorated image or not [column 9, lines 21-30; column 10, lines 22-29];

a processing unit [201] for deteriorating the whole image if it is determined by said discriminating unit that the image is the image including the deteriorated image [column 9, lines 22-30; column 10, lines 1-7]; and

a printing unit [column 4, lines 3-4] for printing the image [205; column 4, lines 61-62] processed by said processing unit [201].

Regarding claims 2, 7 and 12, Oki et al. discloses wherein said deterioration includes deterioration due to compression [column 9, lines 26-28].

Regarding claim 3, Oki et al. is silent about the functional claim language and or limitations “wherein if it is determined by said discriminating unit that the image is the image including the deteriorated image, said processing unit decompresses the image including the deteriorated image and performs compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image”, it should be pointed out that the claimed limitation does not form any part of the printing apparatus as claimed. Since Oki et al.

Art Unit: 2854

teaches all of the structural elements of a printing apparatus as claimed, the printing apparatus of Oki et al. is certainly capable of performing the recited function “wherein if it is determined by said discriminating unit that the image is the image including the deteriorated image, said processing unit decompresses the image including the deteriorated image and performs compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image”. Claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See MPEP 2114. See *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). See also *In re Swinehart*, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971).]

Regarding claim 4, Oki et al. is silent about the functional claim language and or limitations “wherein when a display list is formed, if it is wherein determined by said discriminating unit that the image is the image including the deteriorated image, said processing unit decompresses the image including the deteriorated image and performs the compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image”, it should be pointed out that the claimed limitation does not form any part of the printing apparatus as claimed. Since Oki et al. teaches all of the structural elements of a printing apparatus as claimed, the printing apparatus of Oki et al. is certainly capable of performing the recited function “wherein when a display list is formed, if it is wherein determined by said discriminating unit that the image is the image including the deteriorated image, said processing unit decompresses the image including the deteriorated image and performs the compression which causes the deterioration to the decompressed image, thereby deteriorating the whole

Art Unit: 2854

image”. Claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See MPEP 2114. See *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). See also *In re Swinehart*, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971).]

Regarding claim 5, Oki et al. Oki et al. is silent about the functional claim language and or limitations “wherein upon rendering, if it is determined by said discriminating unit that the image is the image including the deteriorated image, said processing unit decompresses the image including the deteriorated image and performs the compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image”, it should be pointed out that the claimed limitation does not form any part of the printing apparatus as claimed. Since Oki et al. teaches all of the structural elements of a printing apparatus as claimed, the printing apparatus of Oki et al. is certainly capable of performing the recited function “wherein upon rendering, if it is determined by said discriminating unit that the image is the image including the deteriorated image, said processing unit decompresses the image including the deteriorated image and performs the compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image”. Claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See MPEP 2114. See *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). See also *In re Swinehart*, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971).]

Allowable Subject Matter

6. Claims 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 8, the prior art of record does not disclose all the combined steps for a printing method including the step of wherein if it is determined by said discriminating step that the image is the image including the deteriorated image, said processing step decompresses the image including the deteriorated image and performs compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image.

Regarding claim 9, the prior art of record does not disclose all the combined steps for a printing method including the step of wherein when a display list is formed, if it is determined by said discriminating step that the image is the image including the deteriorated image, said processing step decompresses the image including the deteriorated image and performs the compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image.

Regarding claim 10, the prior art of record does not disclose all the combined steps for a printing method including the step of wherein upon rendering, if it is determined by said discriminating step that the image is the image including the deteriorated image, said processing

Art Unit: 2854

step decompresses the image including the deteriorated image and performs the compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image.

7. Claims 13-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Regarding claim 13, the prior art of record does not disclose all the combined instructions (or routines and or subroutines) for a program instructions (or routines and or subroutines) including the instructions (or routines and or subroutines) of wherein if it is determined by said discriminating instructions (or routines and or subroutines) that the image is the image including the deteriorated image, said processing step decompresses the image including the deteriorated image and performs compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image.

Regarding claim 14, the prior art of record does not disclose all the combined instructions or routines and or subroutines for the program instructions (or routines and or subroutines) of wherein when a display list is formed, if it is determined by said discriminating instructions (or routines and or subroutines) that the image is the image including the deteriorated image, said processing instructions (or routines and or subroutines) decompresses the image including the deteriorated image and performs the compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image.

Art Unit: 2854

Regarding claim 15, the prior art of record does not disclose all the combined instructions or routines and or subroutines for the program instructions (or routines and or subroutines) including the instructions (or routines and or subroutines) of wherein upon rendering, if it is determined by said discriminating instructions (or routines and or subroutines) that the image is the image including the deteriorated image, said processing instructions (or routines and or subroutines) decompresses the image including the deteriorated image and performs the compression which causes the deterioration to the decompressed image, thereby deteriorating the whole image.

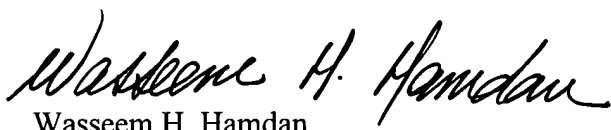
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of record does not teach all the combined steps as discussed .

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wasseem H Hamdan whose telephone number is (571) 272-2166. The examiner can normally be reached on M-F (first Friday off) 6:30 AM- 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2854

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Wasseem H. Hamdan". The signature is written in a cursive style with a large, stylized 'W' and 'H'.

Wasseem H. Hamdan

October 5, 2004